27. (New) The pharmaceutical composition of claim 25, wherein said immune disease is an autoimmune disease.

28. (New) The pharmaceutical composition of claim 27, wherein said autoimmune disease is multiple sclerosis.

29. (New) The pharmaceutical composition of claim 25, wherein the nucleic acid is DNA.

30. (New) The pharmaceutical composition of claim 29, wherein the DNA is naked DNA

31. (New) The pharmaceutical composition of claim 29, wherein the DNA is associated with a transfection-facilitating vehicle.

32. (New) The pharmaceutical composition of claim 31, wherein said transfection-facilitating vehicle is selected from the group consisting of viral particles, cationic lipids, cationic polymers and polypeptides.

33. (New) The pharmaceutical composition of claim 25, wherein said beta-interferon is human beta-interferon.

34. (New) The pharmaceutical composition of claim 25, wherein said beta-interferon comprises a secretory signal sequence.

35. (New) The pharmaceutical composition of claim 25, which is suitable for administration by injection.

36. (New) The method of claim 24, wherein said immune disease is a demyelinating disease.

37. (New) The method of claim 24, wherein said immune disease is an autoimmune disease.

38. (New) The method of claim 37, wherein said autoimmune disease is multiple sclerosis.

39. (New) The method of claim 24, wherein the nucleic acid is DNA.

40. (New) The method of claim 39, wherein the DNA is naked DNA.

41. (New) The method of claim 39, wherein the DNA is associated with a transfection-facilitating vehicle.

42. (New) The method of claim 41, wherein said transfection-facilitating vehicle is selected from the group consisting of viral particles, cationic lipids, cationic polymers and polypeptides.

43. (New) The method of claim 24, wherein said beta-interferon is human beta-interferon.

44. (New) The method of claim 24, wherein said beta-interferon comprises a secretory signal sequence.

45. (New) The method of claim 24, wherein said nucleic acid is suitable for administration by injection.